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CLAIMS

- 1. A communication system comprising a plurality of user stations capable of communicating via respective user channels with a base station having a limited data traffic capacity, coding means operable for encoding data at a plurality of different pre-set data rates, and monitoring means for monitoring the amount of data traffic at said base station and for causing said coding means to reduce the data rate if the amount of data traffic at said base station exceeds a predetermined level, thereby to increase the number of user channels available.
- 2. A communication system according to Claim 1, wherein said monitoring means is operable to cause said coding means to operate at the same data rates in the uplink and downlink directions.
- 15 3. A communication according to Claim 1, including coding means at said user station and corresponding coding means at said base station each capable of operating at a plurality of different data rates, wherein said monitoring means is operable to switch both of said coding means to a particular coding data rate.
- 20 4. A communication system according to Claim 1, including respective coding means for the uplink and downlink directions, wherein said monitoring means is operable to control the coding data rates in both the uplink and downlink directions.
- 5. A communication system according to Claim 4, wherein said
 25 monitoring means is operable to control the coding means to apply different coding data rates in the uplink and downlink directions.
 - 6. A communication system according to Claim 1, wherein said monitoring means is operable to cause said coding means to

change the coding data rate during a call if the data transfer at said base station exceeds a predetermined level.

- 7. A fixed wireless access system comprising a plurality of user stations capable of communicating via respective user radio channels with a base station having a limited data traffic capacity, coding means operable for encoding data at a plurality of different pre-set data rates, said system further including monitoring means for monitoring the amount of data traffic at said base station and for causing said coding means to reduce the data rate if the amount of data traffic at said base station exceeds a predetermined level, thereby to increase the number of user channels available.
- 8. A method of controlling a communication system comprising a plurality of user stations capable of communicating via respective channels with a base station having a limited data traffic capacity, each user channel having associated therewith coding means operable for encoding data at a plurality of different coding rates, which method comprises monitoring the amount of data traffic at said base station and reducing the data coding rate if the amount of data traffic at said base station exceeds a predetermined level, thereby to increase the number of user channels available.
 - 9. A method according to Claim 8, wherein the coding rates in the uplink and downlink directions are the same.
 - 10. A method according to Claim 7, wherein the coding rates in the uplink and downlink directions are different.

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Abstract of the Disclosure

REDUCED DATA RATE COMMUNICATION SYSTEM

A reduced data rate communication system, such as for example a fixed wireless access system, comprises a plurality of user stations each capable of communicating with a common base station.

The user stations can make voice or data calls. The data rate available during a data call is controlled in accordance with the bandwidth or channel capacity available so as to reduce the possibility of blocking whilst still allowing access to the required number of users. The data rate may be reduced prior to or during the data call.